



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,164	08/26/2003	Larry D. Kinsman	3396.8US (97-0696.08/US)	3536
24247	7590	09/21/2005	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110				TRAN, TAN N
		ART UNIT		PAPER NUMBER
		2826		

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/648,164	KINSMAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tan N. Tran	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 August 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.  
 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.  
 5) Claim(s) 14-24 is/are allowed.  
 6) Claim(s) 1-11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

*Minhloan Tran*  
**Minhloan Tran**  
**Primary Examiner**  
**Art Unit 2826**

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>08/26/03; 06/14/04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Election/Restriction***

1. Applicant's election without traverse of Species 1, claims 1-6,9-11,14-16,19-21,24 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6,9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 4, "at least one semiconductor device including a mounting element with a receptacle" is unclear as to whether it is being referred to a package 10 including a mounting element 13 with a receptacle 17 because at least one semiconductor device 12 can not include a mounting element 13 with a receptacle 17 as shown in figs. 2,3.

In claim 9, lines 1,2, "the at least one semiconductor device includes a retainer having at least one receptacle" is unclear as to whether it is being referred to the at least one semiconductor device includes a retainer having said receptacle.

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bellomo et al. (5,449,297).

With regard to claims 10,11, Bellomo et al. discloses a least one semiconductor device (36,38,40) including a protection mechanism 40 and latching arms 92 serve as a mounting element; a connector 32 serves as an alignment device including a slot 46; and the slot 46 serves as the receptacle configured to receive at least an edge of the at least one semiconductor device (36,38,40) with the at least one semiconductor device (36,38,40) being oriented nonparallel to a circuit board 33 wherein the circuit board 33 serves as the carrier substrate and the connector 32 and 10 is configured to be engaged by the latching arms 92. (Note fig. 5 of Bellomo et al.).

***Allowable Subject Matter***

4. Claims 1-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 1-9 are allowable over the prior art of record, because none of these references disclose or can be combined to yield the claimed invention such as at least one package including a mounting element with a receptacle configured to receive at least a portion of the at least one semiconductor device in nonparallel orientation relative to a carrier substrate as recited in claim 1.

5. Claims 14-24 are allowable over the prior art of record, because none of these references disclose or can be combined to yield the claimed invention such as a retainer including including at least one receptacle configured to receive another edge of the at least one semiconductor device as recited in claim 14.

### **Conclusion**

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Tan Tran whose telephone number is (571) 272-1923. The examiner can normally be reached on M-F 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for after final communications.

Application/Control Number: 10/648,164  
Art Unit: 2826

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

TT

Aug 2005